



[6450-01-P]

DEPARTMENT OF ENERGY

10 CFR Parts 430 and 431

[Docket Number EERE–2010–BT–NOA–0028]

RIN: 1904-AC24

Energy Conservation Program for Consumer Products and Certain Commercial and Industrial Equipment: Notice of Policy Amendment Regarding Full-Fuel-Cycle Analyses

AGENCY: Office of Energy Efficiency and Renewable Energy, Department of Energy.

ACTION: Notice of policy amendment.

SUMMARY: On August 18, 2011, the U.S. Department of Energy (DOE) announced its intention to use full-fuel-cycle (FFC) measures of energy use and greenhouse gas and other emissions in the national impact analyses and environmental assessments included in future energy conservation standards rulemakings. While DOE stated in that notice that it intended to use the Greenhouse Gases, Regulated Emissions, and Energy Use in Transportation (GREET) model to conduct the analyses, the Department also said that it would review alternative methods, including the use of the National Energy Modeling System (NEMS) developed by DOE's Energy Information Administration (EIA). After evaluating both NEMS and GREET,

DOE has determined that NEMS is ultimately a more appropriate tool to calculate FFC measures of energy use and greenhouse gas and other emissions. Therefore, DOE intends to use the NEMS model, rather than the GREET model, as the basis for deriving the energy and emission multipliers used to conduct FFC analyses in support of future energy conservation standards rulemakings. The public is free to send in comments on this policy amendment at any time. DOE will address comments on this policy amendment in the first notice of proposed rulemaking (NPR) to utilize the NEMS-based approach for the FFC.

DATES: [insert date of publication]

ADDRESSES: Interested persons are encouraged to submit comments using the Federal eRulemaking Portal at <http://www.regulations.gov>. Follow the instructions for submitting comments. Alternatively, interested persons may submit comments, identified by docket number EERE-2011-BT- NOA-0028, by any of the following methods:

- E-mail: to FFC-2010-NOA-0028@ee.doe.gov. Include EERE-2011-BT- NOA-0028 in the subject line of the message.
- Mail: Ms. Brenda Edwards, U.S. Department of Energy, Building Technologies Program, Mailstop EE-2J, Notice of Policy Amendment to Full Fuel Cycle Analyses, EERE-2011-BT- NOA-0028, 1000 Independence Avenue, SW., Washington, DC 20585-0121. Phone: (202) 586-2945. If possible, please submit all items on a CD. It is not necessary to include printed copies. Hand Delivery/Courier: Ms. Brenda Edwards, U.S. Department of Energy, Building Technologies Program, 6th Floor, 950 L'Enfant Plaza, SW., Washington, DC 20024. Phone: (202) 586-2945. If possible, please submit all items on a CD. It is not necessary to include printed copies. Instructions: All submissions received must include the agency name and docket number or RIN for this rulemaking.

Docket: For access to the docket to read background documents, or comments received, go to the Federal eRulemaking Portal at <http://www.regulations.gov>.

FOR FURTHER INFORMATION CONTACT: Mr. Jeremy Domm, U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, Building Technologies Program, EE-2J, 1000 Independence Avenue, SW., Washington, DC 20585-0121. Telephone: (202) 586-9870. E-mail: Jeremy.Domm@ee.doe.gov.

Ms. Ami Grace-Tardy, U.S. Department of Energy, Office of the General Counsel, GC-71, 1000 Independence Avenue, SW., Washington, DC 20585-0121. Telephone: (202) 586-5709. E-mail: Ami.Grace-Tardy@hq.doe.gov.

SUPPLEMENTARY INFORMATION:

I. Introduction and Discussion

On August 18, 2011, the U.S. Department of Energy (DOE) published a policy statement announcing its intention to use full-fuel-cycle (FFC) measures of energy use and greenhouse gas and other emissions in the national impact analyses and environmental assessments included in future energy conservation standards rulemakings. (76 FR 51281) While DOE stated in that notice that it intended to use the Greenhouse Gases, Regulated Emissions, and Energy Use in Transportation (GREET) model to conduct the analysis, the Department also said that it would, from time to time, review alternative approaches to estimating these factors, including use of the National Energy Modeling System (NEMS) developed by DOE's Energy Information Administration (EIA). (76 FR 51287) As indicated in the FFC policy statement notice, NEMS

would continue to be utilized by DOE to estimate primary (or site) energy consumption for national impact analyses and environmental assessments, while GREET would be used to develop the energy and emission multipliers necessary to convert the NEMS-based primary energy and emission impacts into FFC values. Because of concerns about the potential effects of certain inconsistencies in the underlying assumptions and forecasts used by GREET and NEMS, subsequent to publication of the policy statement, DOE initiated a further review to determine whether NEMS (rather than GREET) might be used to develop the necessary FFC multipliers.

During this review process, DOE examined a new methodology to develop FFC multipliers using the data and projections generated by NEMS and published in EIA's Annual Energy Outlook (AEO). While the AEO does not provide direct calculations of FFC metrics, it does provide extensive information about the energy system, including projections of future oil, natural gas and coal supply, energy use for oil and gas field and refinery operations, and fuel consumption and emissions related to electric power production. This information is used to define a set of parameters representing the amount of energy used in the fuel production chain. For example, the petroleum fuel production chain consists of extraction, separation, refining and distribution of final products to the end user. Each of these process steps consumes energy in the form of diesel or fuel oil, natural gas, or grid electricity. The data are used to estimate an intensity parameter for each fuel type, which is equal to the total amount of that fuel needed to produce one unit of the final product. The FFC energy and emissions factors are defined as a function of these parameters, using a formula that is described in detail in: [“A Mathematical Analysis of Full Fuel Cycle Energy Use”](#);

[\[http://www.sciencedirect.com/science/article/pii/S0360544211006803\]](http://www.sciencedirect.com/science/article/pii/S0360544211006803)¹ Energy, Volume 37, Issue 1, January 2012, Pages 698–708;

By using the FFC multipliers derived from NEMS, DOE would be able to ensure that the assumptions and inputs used in FFC analyses are consistent with the assumptions and inputs used to estimate primary energy savings and emissions impacts. In addition, this approach would make it easier for DOE to update the multipliers with each new edition of the AEO. The GREET model, in contrast, uses a representation of the energy production system to develop its own internal projections, which inevitably will differ some from those in the AEO.

Based on this assessment, DOE is proposing to use this NEMS-based approach to estimating the FFC energy and emission impacts of alternative energy conservation standards levels in energy conservation standards rulemakings that reach the notice of proposed rulemaking (NOPR) stage after **[INSERT DATE OF FEDERAL REGISTER PUBLICATION]**. Rulemakings that do not reach the NOPR stage before **[INSERT DATE OF FEDERAL REGISTER PUBLICATION]** will continue to use the estimates of primary energy and emission impacts described in the notices of proposed rulemaking. DOE has not used the GREET model to estimate FFC energy and emission impacts in any past or current rulemakings but has started to use the NEMS-based approach to estimating these impacts in several energy conservation standards preliminary analyses.

¹Coughlin, Katie (2012). A Mathematical Analysis of Full Fuel Cycle Energy Use. Energy, Volume 37, Issue 1, January 2012, Pages 698–708.

II. Public Participation

DOE invites all interested parties to submit comments on this issue in writing at any time. In addition, interested parties will have an opportunity to review and comment on the specific methodologies employed by DOE to calculate FFC energy and emission impacts in NOPRs. See the **ADDRESSES** section of this notice for more information on how to submit a comment.

III. Procedural Issues and Regulatory Review

A. Review Under the National Environmental Policy Act 1969

DOE has determined that this policy amendment falls into a class of actions that are categorically excluded from review under the National Environmental Policy Act of 1969 (42 U.S.C. 4321 *et seq.*) and DOE's implementing regulations at 10 CFR part 1021. Specifically, this policy amendment describes methods for data analysis and how DOE plans to incorporate such data analysis into future energy conservation standards. For this reason, and because the policy amendment does not establish an energy conservation standard or take any action that might have an impact on the environment, it is covered by the Categorical Exclusion A9 under 10 CFR part 1021, subpart D. Accordingly, neither an environmental assessment nor an environmental impact statement is required

B. Review Under the Information Quality Bulletin for Peer Review

In consultation with the Office of Science and Technology Policy (OSTP), OMB issued on December 16, 2004, its "Final Information Quality Bulletin for Peer Review" (the Bulletin). 70 FR 2664 (Jan. 14, 2005). The Bulletin establishes that certain scientific information shall be peer reviewed by qualified specialists before it is disseminated by the Federal government, including influential scientific information related to agency regulatory actions. The purpose of the

Bulletin is to enhance the quality and credibility of the government's scientific information. Under the Bulletin, NEMS is "influential scientific information," which the Bulletin defines as "scientific information that the agency reasonably can determine will have or does have a clear and substantial impact on important public policies or private sector decisions." 70 FR 2664, 2667 (Jan. 14, 2005). The NEMS model, which is in the public domain, has been reviewed through its development and applications over the past 18 years.

IV. Approval of the Office of the Assistant Secretary

The Assistant Secretary of DOE's Office of Energy Efficiency and Renewable Energy has approved publication of this final policy.

Issued in Washington, DC, on August 9, 2012.

Kathleen B. Hogan
Deputy Assistant Secretary for Energy Efficiency
Energy Efficiency and Renewable Energy

[FR Doc. 2012-20122 Filed 08/16/2012 at 8:45 am;

Publication Date: 08/17/2012]